

GROUND-WATER LEVELS

WAKE COUNTY—Continued

354356078403502. County number, WK-278; DENR Lake Wheeler Research Station MW-11 (Transition zone well).

LOCATION.--Lat 35°43'55.8", long 78°40'34.5", Hydrologic Unit 03020201, .6 mi south of Tryon Road, .2 mi east of Lake Wheeler Road on NCSU Research Farm. Owner: DENR (North Carolina Department of Environment and Natural Resources), Division of Water Quality.

WATER-LEVEL RECORDS

AQUIFER.--Regolith (saprolitic Raleigh Gneiss).

WELL CHARACTERISTICS.--Drilled observation well, depth 41.5 ft, diameter 4 in., cased to 31.5 ft, screened interval from 31.5 to 41.5 ft, sand filter packed from 26.5 to 42 ft.

INSTRUMENTATION.--Water-level recorder collecting data at 60-minute intervals. Satellite telemetry at station.

DATUM.--Land-surface datum is 335.36 ft above NGVD of 1929. Measuring point: Top of instrument shelter floor, 1.87 ft above land-surface datum.

REMARKS.--Well is part of Piedmont/Mountains groundwater project.

PERIOD OF RECORD.--July 2001 to current year. Continuous record began December 2001. Periodic water level measurements made by DENR, July 2001 to December 2001.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 0.56 ft below land-surface datum, July 2, 2003; lowest water level recorded 3.57 ft below land-surface datum, Aug. 13, 2002.

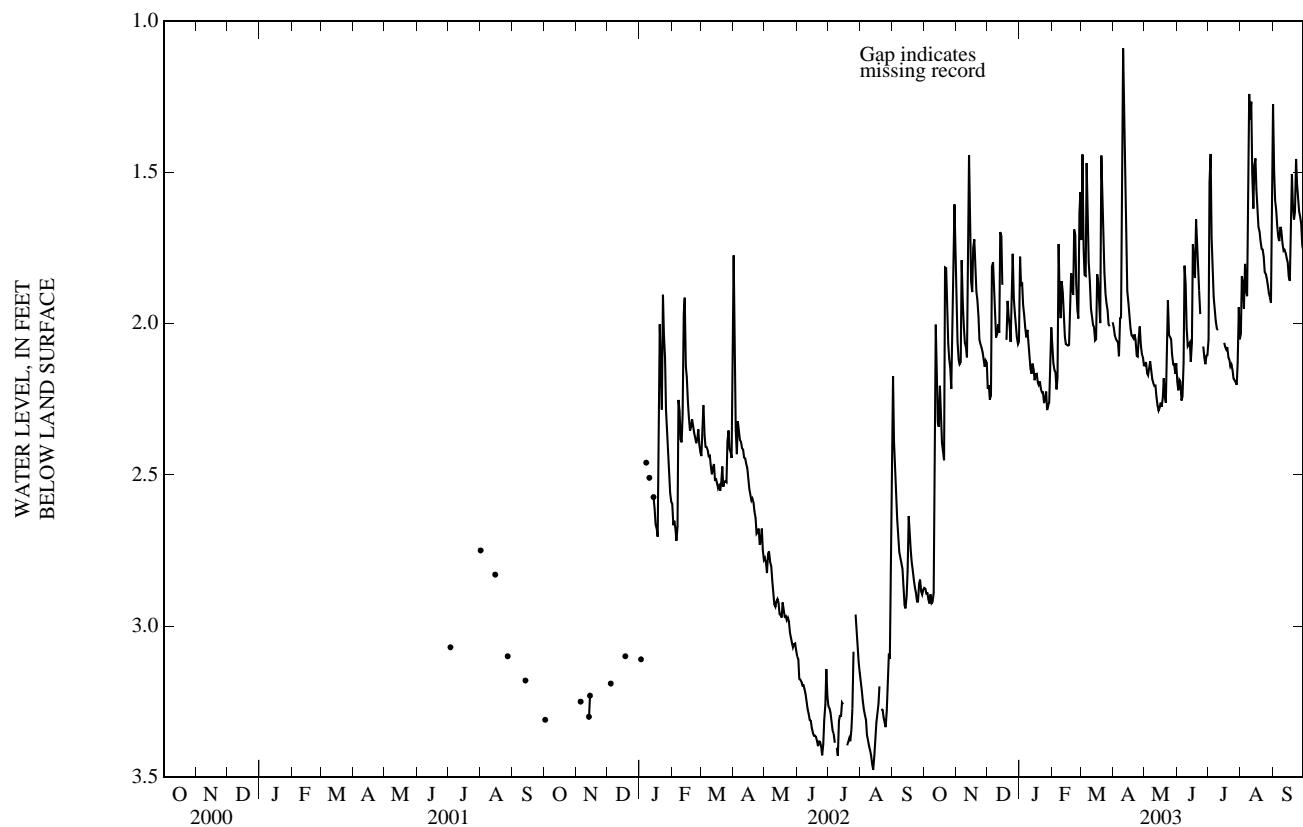
DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.87	1.97	2.22	1.78	2.07	1.72	2.02	2.14	2.19	2.05	2.03	1.27
2	2.88	2.06	2.20	1.87	2.13	1.44	2.04	2.13	2.22	1.53	1.84	1.50
3	2.89	2.12	2.25	1.87	2.15	1.75	2.05	2.16	2.19	1.44	1.87	1.59
4	2.89	2.13	2.24	1.94	2.16	1.84	2.06	2.17	2.19	1.72	1.95	1.63
5	2.91	2.13	1.81	1.97	2.22	1.84	2.06	2.15	2.25	1.84	1.80	1.68
6	2.93	1.79	1.80	2.01	2.18	1.47	2.11	2.12	2.24	1.91	1.89	1.72
7	2.90	1.93	1.88	2.05	1.74	1.69	1.98	2.16	2.13	1.96	1.91	1.73
8	2.92	2.01	1.97	2.02	1.91	1.80	1.98	2.18	1.81	1.99	1.46	1.68
9	2.92	2.06	2.05	2.06	1.98	1.86	1.57	2.20	1.87	2.02	1.24	1.69
10	2.89	2.08	2.03	2.11	1.86	1.95	1.09	2.21	2.01	2.02	1.33	1.74
11	2.21	2.11	2.00	2.15	1.90	1.98	1.42	2.21	2.08	---	1.27	1.76
12	2.00	1.77	2.03	2.17	1.97	2.00	1.66	2.25	2.07	---	1.50	1.76
13	2.20	1.44	1.70	2.13	2.04	2.01	1.81	2.27	2.06	---	1.62	1.77
14	2.33	1.74	1.71	2.15	2.07	2.06	1.89	2.29	2.13	---	1.48	1.78
15	2.34	1.86	1.87	2.19	2.07	2.05	1.93	2.28	2.06	---	1.45	1.80
16	2.21	1.90	---	2.17	2.07	1.84	1.97	2.26	1.74	2.06	1.56	1.84
17	2.31	1.75	---	2.17	2.07	1.86	2.01	2.28	1.80	2.08	1.63	1.86
18	2.39	1.72	---	2.19	1.95	1.93	2.04	2.25	1.85	2.09	1.68	1.65
19	2.42	1.81	2.05	2.20	1.83	2.00	2.04	2.18	1.66	2.08	1.70	1.51
20	2.45	1.89	1.93	2.19	1.88	1.44	2.05	2.24	1.71	2.11	1.73	1.61
21	1.81	1.92	1.97	2.22	1.91	1.54	2.04	2.26	1.79	2.12	1.75	1.66
22	1.82	1.98	2.01	2.23	1.69	1.72	2.06	2.04	1.89	2.14	1.76	1.63
23	1.95	2.05	2.06	2.23	1.71	1.83	2.11	1.92	1.97	2.14	1.78	1.46
24	2.07	2.07	1.91	2.26	1.87	1.90	2.11	2.04	---	2.15	1.83	1.54
25	2.12	2.08	1.77	2.25	1.95	1.93	2.04	2.04	---	2.18	1.84	1.59
26	2.15	2.10	1.92	2.23	1.98	1.96	2.01	2.05	2.08	2.19	1.85	1.63
27	2.22	2.12	1.96	2.29	1.63	2.00	2.07	2.10	2.11	2.19	1.88	1.65
28	2.08	2.14	2.00	2.27	1.57	2.01	2.10	2.13	2.13	2.20	1.90	1.67
29	1.82	2.12	2.05	2.26	---	---	2.11	2.13	2.11	2.13	1.91	1.74
30	1.61	2.13	2.07	2.16	---	---	2.14	2.17	2.10	1.95	1.93	1.76
31	1.84	---	2.06	2.01	---	2.00	---	2.13	---	2.05	1.48	---

WTR YR 2003 MEAN 1.98 HIGH 1.09 LOW 2.93

WAKE COUNTY—Continued

354356078403502. County number, WK-278; DENR Lake Wheeler Research Station MW-II (Transition zone well).



WAKE COUNTY--Continued

354356078403502 WK-278 DENR Lake Wheeler Research Station MW-1I (Transition zone well)—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 2002 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: December 2001 to August 2002, October 2002 to September 2003.

pH: December 2001 to August 2002, October 2002 to September 2003.

WATER TEMPERATURE: December 2001 to August 2002, October 2002 to September 2003.

DISSOLVED OXYGEN: January to August 2002, October 2002 to September 2003.

DISSOLVED OXYGEN, PERCENT SATURATION: January to August 2002, October 2002 to September 2003.

INSTRUMENTATION.-- Water-quality monitor with satellite telemetry from December 2001 to August 2002, October 2002 to present.

REMARKS.--Station operated in cooperation with North Carolina Department of Environment and Natural Resources, Water Resources Division as part of the Piedmont/Mountains ground-water project. Dissolved oxygen, percent saturation, is computed using a barometric pressure of 760 mm Hg.

EXTREMES FOR PERIOD OF DAILY RECORD.--

CONSTITUENT	MAXIMUM RECORDED	MINIMUM RECORDED
SPECIFIC CONDUCTANCE, microsiemens	209, September 18, 2003	118, January 17, 2002
pH, standard units	5.8, October 14, 15, 2002	5.0, on many days during the period
WATER TEMPERATURE, °C	16.2, on several days during the period	15.9, on many days during the period
DISSOLVED OXYGEN, mg/L	3.8, November 14, 2002	1.2, September 18, 2003
DISSOLVED OXYGEN, PERCENT SATURATION, %	39, November 14, 2002	12, September 18, 2003

EXTREMES FOR CURRENT YEAR.--

CONSTITUENT	MAXIMUM RECORDED	MINIMUM RECORDED
SPECIFIC CONDUCTANCE, microsiemens	209, September 18	132, October 11
pH, standard units	5.8, October 14, 15	5.0, on many days during the year
WATER TEMPERATURE, °C	16.2, on several days during the year	16.0, on many days during the year
DISSOLVED OXYGEN, mg/L	3.8, November 14	1.2, September 18
DISSOLVED OXYGEN, PERCENT SATURATION, %	39, November 14	12, September 18

354356078403502 WK-278 DENR Lake Wheeler Research Station MW-II (Transition zone well)—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
 WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	150	162	162	175	171	180	180	181	186	183	194
2	---	151	164	160	171	171	181	179	182	186	182	194
3	---	152	166	161	170	171	181	179	181	186	182	194
4	---	153	168	162	182	172	181	179	182	187	182	194
5	---	153	167	164	179	173	181	180	182	187	182	194
6	---	153	166	165	176	173	181	180	183	187	182	195
7	---	153	168	166	166	173	182	179	182	188	182	195
8	---	153	170	166	163	174	181	179	182	188	183	196
9	---	154	171	167	163	174	181	179	182	188	183	197
10	---	154	171	166	163	174	180	179	182	188	184	198
11	132	154	171	167	164	175	181	179	182	---	184	200
12	136	155	169	168	164	176	181	178	182	---	185	202
13	138	160	168	169	164	176	182	178	182	---	185	203
14	141	154	165	169	165	176	181	179	181	---	185	203
15	143	142	168	169	165	176	182	180	181	---	186	204
16	142	147	---	170	165	177	183	180	181	189	186	206
17	142	149	---	171	165	177	183	180	181	188	187	206
18	143	152	---	171	166	---	182	179	181	188	188	207
19	144	154	165	172	166	178	182	179	181	188	189	207
20	145	155	165	172	167	177	182	179	181	188	190	206
21	144	157	164	173	168	177	182	178	182	187	190	205
22	145	158	164	174	168	178	182	178	182	187	191	204
23	146	161	163	175	168	178	181	178	183	187	192	204
24	145	161	163	177	169	178	181	178	---	187	193	204
25	145	161	160	179	170	---	181	179	---	185	193	203
26	147	161	159	181	170	---	181	179	184	185	194	203
27	148	161	161	182	171	178	181	179	184	185	194	203
28	148	161	162	183	170	179	180	179	184	184	194	202
29	149	161	163	183	---	---	180	179	184	184	194	203
30	149	162	163	182	---	---	180	180	185	183	194	203
31	150	---	163	179	---	180	---	181	---	183	194	---
MEAN	---	155	---	171	168	---	181	179	---	---	188	201
MAX	---	162	---	183	182	---	183	181	---	---	194	207
MIN	---	142	---	160	163	---	180	178	---	---	182	194

WAKE COUNTY--Continued

354356078403502 WK-278 DENR Lake Wheeler Research Station MW-II (Transition zone well)—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	5.5	5.4	5.3	5.3	5.3	5.2	5.1	5.2	5.1	5.1	5.1
2	---	5.5	5.4	5.3	5.4	5.3	5.2	5.1	5.1	5.1	5.1	5.1
3	---	5.5	5.4	5.3	5.4	5.3	5.2	5.1	5.1	5.1	5.1	5.1
4	---	5.5	5.4	5.3	5.3	5.3	5.2	5.1	5.1	5.1	5.1	5.1
5	---	5.4	5.4	5.3	5.3	5.3	5.2	5.1	5.1	5.1	5.1	5.1
6	---	5.4	5.3	5.3	5.3	5.3	5.2	5.1	5.1	5.1	5.1	5.1
7	---	5.4	5.3	5.3	5.4	5.3	5.2	5.1	5.1	5.1	5.1	5.1
8	---	5.4	5.4	5.3	5.4	5.3	5.2	5.1	5.1	5.1	5.1	5.1
9	---	5.4	5.4	5.3	5.4	5.3	5.2	5.1	5.1	5.1	5.1	5.1
10	---	5.4	5.4	5.3	5.4	5.3	5.2	5.1	5.1	5.0	5.1	5.1
11	---	5.4	5.4	5.3	5.4	5.3	5.2	5.1	5.1	---	5.1	5.1
12	---	5.4	5.4	5.3	5.4	5.3	5.2	5.1	5.1	---	5.1	5.1
13	---	5.4	5.4	5.3	5.4	5.3	5.2	5.1	5.1	---	5.1	5.1
14	---	5.5	5.4	5.3	5.4	5.3	5.2	5.1	5.1	---	5.0	5.1
15	5.8	5.5	5.4	5.3	5.4	5.3	5.2	5.1	5.1	---	5.0	5.1
16	5.7	5.5	---	5.3	5.4	5.3	5.2	5.1	5.1	5.1	5.0	5.1
17	5.7	5.5	---	5.3	5.4	5.3	5.2	5.1	5.1	5.1	5.0	5.1
18	5.7	5.5	---	5.3	5.4	---	5.2	5.1	5.1	5.1	5.0	5.1
19	5.7	5.5	5.3	5.3	5.4	5.2	5.2	5.1	5.1	5.1	5.0	5.1
20	5.7	5.5	5.3	5.3	5.4	5.2	5.2	5.2	5.1	5.1	5.0	5.1
21	5.6	5.5	5.3	5.3	5.4	5.2	5.2	5.2	5.1	5.1	5.0	5.1
22	5.6	5.5	5.3	5.3	5.4	5.2	5.2	5.2	5.1	5.1	5.0	5.1
23	5.7	5.5	5.3	5.3	5.4	5.2	5.2	5.2	5.1	5.1	5.0	5.1
24	5.6	5.4	5.3	5.3	5.4	5.2	5.2	5.2	---	5.1	5.0	5.1
25	5.6	5.4	5.3	5.3	5.3	---	5.2	5.2	---	5.1	5.0	5.1
26	5.5	5.4	5.3	5.3	5.3	---	5.2	5.2	5.1	5.1	5.0	5.1
27	5.5	5.4	5.3	5.3	5.3	5.2	5.2	5.2	5.1	5.1	5.1	5.1
28	5.5	5.4	5.3	5.3	5.3	5.2	5.2	5.2	5.1	5.1	5.1	5.1
29	5.5	5.4	5.3	5.3	---	---	5.2	5.2	5.1	5.1	5.1	5.0
30	5.5	5.4	5.3	5.3	---	---	5.1	5.2	5.1	5.1	5.1	5.0
31	5.5	---	5.3	5.3	---	5.2	---	5.2	---	5.1	5.1	---
MEAN	---	5.4	---	5.3	5.4	---	5.2	5.1	---	---	5.1	5.1
MAX	---	5.5	---	5.3	5.4	---	5.2	5.2	---	---	5.1	5.1
MIN	---	5.4	---	5.3	5.3	---	5.1	5.1	---	---	5.0	5.0

354356078403502 WK-278 DENR Lake Wheeler Research Station MW-II (Transition zone well)—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	16.1	16.1	16.1	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
2	---	16.1	16.1	16.1	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
3	---	16.1	16.1	16.1	16.1	16.0	16.0	16.0	16.0	16.0	16.0	16.0
4	---	16.1	16.1	16.1	16.1	16.0	16.0	16.0	16.0	16.0	16.0	16.0
5	---	16.1	16.1	16.1	16.2	16.0	16.0	16.0	16.0	16.0	16.0	16.0
6	---	16.1	16.1	16.1	16.1	16.0	16.0	16.0	16.0	16.0	16.0	16.0
7	---	16.1	16.1	16.1	16.1	16.0	16.0	16.0	16.0	16.0	16.0	16.0
8	---	16.1	16.1	16.1	16.1	16.0	16.0	16.0	16.0	16.0	16.0	16.0
9	---	16.1	16.1	16.1	16.1	16.0	16.0	16.0	16.0	16.0	16.0	16.0
10	---	16.1	16.1	16.1	16.1	16.0	16.0	16.0	16.0	16.0	16.0	16.0
11	16.0	16.1	16.1	16.1	16.1	16.0	16.0	16.0	16.0	---	16.0	16.0
12	16.1	16.1	16.1	16.1	16.1	16.0	16.0	16.0	16.0	---	16.0	16.0
13	16.0	16.1	16.1	16.1	16.1	16.0	16.0	16.0	16.0	---	16.0	16.0
14	16.1	16.1	16.1	16.1	16.1	16.0	16.0	16.0	16.0	---	16.0	16.0
15	16.1	16.1	16.1	16.1	16.0	16.0	16.0	16.0	16.0	---	16.0	16.0
16	16.1	16.1	---	16.1	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
17	16.1	16.1	---	16.1	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
18	16.1	16.1	---	16.1	16.0	---	16.0	16.0	16.0	16.0	16.0	16.0
19	16.1	16.1	16.1	16.1	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
20	16.1	16.1	16.1	16.1	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
21	16.1	16.1	16.1	16.1	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
22	16.1	16.1	16.1	16.1	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
23	16.1	16.1	16.1	16.1	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
24	16.1	16.1	16.1	16.1	16.0	16.0	16.0	16.0	16.0	---	16.0	16.0
25	16.1	16.1	16.1	16.1	16.0	---	16.0	16.0	---	16.0	16.0	16.0
26	16.1	16.1	16.1	16.1	16.0	---	16.0	16.0	16.0	16.0	16.0	16.0
27	16.1	16.1	16.1	16.1	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
28	16.1	16.1	16.1	16.1	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
29	16.1	16.1	16.1	16.2	---	---	16.0	16.0	16.0	16.0	16.0	16.0
30	16.1	16.1	16.1	16.2	---	---	16.0	16.0	16.0	16.0	16.0	16.0
31	16.1	---	16.1	16.2	---	16.0	---	16.0	---	16.0	16.0	---
MEAN	---	16.1	---	16.1	16.1	---	16.0	16.0	---	---	16.0	16.0
MAX	---	16.1	---	16.2	16.2	---	16.0	16.0	---	---	16.0	16.0
MIN	---	16.1	---	16.1	16.0	---	16.0	16.0	---	---	16.0	16.0

WAKE COUNTY--Continued

354356078403502 WK-278 DENR Lake Wheeler Research Station MW-II (Transition zone well)—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	2.7	1.6	2.4	2.0	2.5	2.4	2.4	1.8	1.6	2.2	1.9
2	---	2.7	1.8	2.4	2.2	2.5	2.4	2.3	1.8	1.6	2.2	2.0
3	---	2.7	1.9	2.4	2.3	2.5	2.4	2.3	1.8	1.6	2.2	2.0
4	---	2.7	1.9	2.3	2.1	2.5	2.4	2.3	1.7	1.6	2.2	2.0
5	---	2.7	2.1	2.3	2.1	2.5	2.4	2.2	1.7	1.6	2.2	2.0
6	---	2.7	2.1	2.3	2.2	2.5	2.4	2.2	1.7	1.6	2.2	2.0
7	---	2.6	2.2	2.3	2.7	2.5	2.3	2.2	1.7	1.7	2.2	2.0
8	---	2.6	2.3	2.2	2.9	2.4	2.4	2.2	1.7	1.7	2.2	1.9
9	---	2.6	2.3	2.3	2.9	2.5	2.4	2.2	1.6	1.7	2.2	1.8
10	---	2.6	2.3	2.3	2.9	2.5	2.5	2.2	1.6	1.7	2.1	1.8
11	2.6	2.6	2.3	2.3	2.9	2.5	2.5	2.1	1.6	---	2.1	1.6
12	2.9	2.6	2.2	2.2	2.9	2.5	2.5	2.1	1.7	---	2.1	1.5
13	2.8	2.6	2.1	2.2	2.9	2.5	2.6	2.1	1.6	---	2.1	1.5
14	2.8	2.9	2.1	2.2	2.9	2.5	2.6	2.1	1.7	---	2.0	1.4
15	2.7	3.3	2.1	2.2	2.8	2.5	2.6	2.1	1.7	---	2.0	1.4
16	2.6	3.0	---	2.2	2.9	2.5	2.6	2.1	1.7	1.7	2.0	1.4
17	2.6	2.8	---	2.2	2.9	2.6	2.5	2.2	1.7	1.7	1.9	1.3
18	2.5	2.6	---	2.2	2.9	---	2.5	2.2	1.8	1.8	1.9	1.3
19	2.5	2.5	2.2	2.2	2.9	2.5	2.5	2.2	1.8	1.8	1.8	1.3
20	2.5	2.4	2.2	2.2	2.9	2.5	2.5	2.2	1.7	1.8	1.8	1.4
21	2.5	2.4	2.3	2.1	2.8	2.6	2.5	2.2	1.7	1.9	1.8	1.4
22	2.6	2.3	2.3	2.1	2.8	2.5	2.5	2.2	1.6	1.9	1.8	1.6
23	2.6	2.1	2.3	2.1	2.8	2.5	2.4	2.1	1.6	1.9	1.7	1.6
24	2.6	1.7	2.3	2.0	2.7	2.5	2.4	2.1	---	2.0	1.7	1.6
25	2.6	1.4	2.4	2.0	2.5	---	2.4	2.1	---	2.0	1.8	1.7
26	2.7	1.4	2.4	2.0	2.5	---	2.4	2.0	1.6	2.0	1.8	1.7
27	2.8	1.3	2.4	1.9	2.5	2.4	2.4	2.0	1.7	2.1	1.8	1.7
28	2.8	1.3	2.4	1.9	2.5	2.4	2.4	2.0	1.7	2.1	1.8	1.8
29	2.8	1.4	2.3	2.0	---	---	2.4	1.9	1.7	2.1	1.8	1.8
30	2.7	1.5	2.3	2.0	---	---	2.4	1.8	1.6	2.2	1.9	1.8
31	2.7	---	2.3	2.0	---	2.3	---	1.8	---	2.2	1.9	---
MEAN	---	2.4	---	2.2	2.7	---	2.5	2.1	---	---	2.0	1.7
MAX	---	3.3	---	2.4	2.9	---	2.6	2.4	---	---	2.2	2.0
MIN	---	1.3	---	1.9	2.0	---	2.3	1.8	---	---	1.7	1.3

354356078403502 WK-278 DENR Lake Wheeler Research Station MW-II (Transition zone well)—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	27	16	24	20	25	24	24	18	16	22	19
2	---	27	18	24	22	25	24	23	18	16	22	20
3	---	27	19	24	23	25	24	23	18	16	22	20
4	---	27	19	23	21	25	24	23	17	16	22	20
5	---	27	21	23	21	25	24	22	17	16	22	20
6	---	27	21	23	22	25	24	22	17	16	22	20
7	---	26	22	23	28	25	23	22	17	17	22	20
8	---	26	23	22	30	24	24	22	17	17	22	19
9	---	26	23	23	30	25	24	22	16	17	22	18
10	---	26	23	23	30	25	25	22	16	17	21	18
11	26	26	23	23	30	25	25	21	16	---	21	16
12	30	26	22	22	29	25	25	21	17	---	21	15
13	28	26	21	22	29	25	26	21	16	---	21	15
14	28	29	21	22	29	25	26	21	17	---	20	14
15	27	34	21	22	28	25	26	21	17	---	20	14
16	26	30	---	22	29	25	26	21	17	17	20	14
17	26	28	---	22	29	26	25	22	17	17	19	13
18	25	26	---	22	29	---	25	22	18	18	19	13
19	25	25	22	22	29	25	25	22	18	18	18	13
20	25	24	22	22	29	25	25	22	17	18	18	14
21	25	24	23	21	28	26	25	22	17	19	18	14
22	26	23	23	21	28	25	25	22	16	19	18	16
23	26	21	23	21	28	25	24	21	16	19	17	16
24	26	17	23	20	27	25	24	21	---	20	17	16
25	26	14	24	20	25	---	24	21	---	20	18	17
26	27	14	24	20	25	---	24	20	16	20	18	17
27	28	13	24	19	25	24	24	20	17	21	18	17
28	28	13	24	19	25	24	24	20	17	21	18	18
29	28	14	23	20	---	---	24	19	17	21	18	18
30	27	15	23	20	---	---	24	18	16	22	19	18
31	27	---	23	20	---	23	---	18	---	22	19	---
MEAN	---	24	---	22	27	---	25	21	---	---	20	17
MAX	---	34	---	24	30	---	26	24	---	---	22	20
MIN	---	13	---	19	20	---	23	18	---	---	17	13

354356078403502 WK-278 DENR LAKE WHEELER RESEARCH STATION MW-1I (TRANSITION ZONE WELL)—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 2001 to current year.

REMARKS.--Station operated in cooperation with North Carolina Department of Environment and Natural Resources, Water Resources Division as part of the Piedmont/Mountains ground-water project.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conduc-tance, wat unf uS/cm 25 degC (00095)	Temper-ature, water, deg C (00010)	Hard-ness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnes-i um, water, fltrd, mg/L (00925)	Potas-sium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L as CaCO3 (00419)	ANC, wat unf incr. titr., field, mg/L (71870)	Bromide water, fltrd, mg/L (00940)	Chlor-ide, water, fltrd, mg/L (00940)
NOV 14...	1545	2.7	5.4	143	16.1	32	9.33	2.15	2.98	12.7	26	0.05	11.0
Chemical Data:													
Date	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Alum-inum, water, fltrd, ug/L (01106)	Anti-mony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryll-ium, water, fltrd, ug/L (01010)
NOV 14...	29.4	1.4	115	0.11	0.09	6.67	<0.008	0.05	7	<0.30	<2	61	0.33
Date	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)	Chrom-ium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Mangan-ese, water, fltrd, ug/L (01056)	Molyb-denum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01145)	Selen-ium, water, fltrd, ug/L (01075)	Silver, water, fltrd, ug/L (01090)	Zinc, water, fltrd, ug/L (01090)
NOV 14...	<13	0.05	<0.8	0.271	0.2	38	<0.08	41.0	0.7	0.97	<3	<0.2	4
Radioactive Data:													
Date			Alpha radio-activity water, fltrd, Th-230, pCi/L (04126)	Gross radioac-ty water, fltrd, Cs-137, pCi/L (03515)	Rn-222, water, unfltrd (82303)	Uranium natural water, fltrd, ug/L (22703)							
NOV 14...					2.2	7.3	11,600	0.05					